- MEMBER AGENCIES -

California Department of Transportation California Highway Patrol California State Association of Counties League of California Cities California State Automobile Association Automobile Club of Southern

California Traffic Control Devices Committee



(916) 654-4715

California

April 18, 2001

Members and Alternates California Traffic Control Devices Committee (CTCDC):

Attached for your information are summarized minutes with segregated agenda items, from the CTCDC meeting held in Santa Cruz, on February 15, 2001. The minutes are also available on the Caltrans website at the following address:

http://www.dot.ca.gov/hq/traffops/signtech/newtech/

During the February 15, 2001 CTCDC meeting, the Committee discussed a request (**Item 01-2**, **Proposal to Expand the Committee**) to expand the Committee by including a representatives from the private sector. The attached minutes address this proposal. California Vehicle Code Section 21400 requires that "Caltrans shall, after consultation with local agencies and public hearings, adopt rules and regulations prescribing uniform standards and specifications for all official traffic control devices placed pursuant to this code...." This Committee fulfils that requirement.

The Committee would appreciate any comments on the proposal regarding adding the private sector, or other appropriate organization/agency, to the CTCDC. Please send comments to the CTCDC Secretary at 1120 N St, MS 36, Sacramento, CA 95814 or by e-mailing the Secretary at Devinder_Singh@dot.ca.gov.

The next CTCDC meeting is scheduled for Thursday, June 7, 2001. The meeting will be held in the Caltrans Auditorium at 2829 Juan St., San Diego, CA 92816. Items to be included in the agenda for the June 7, 2001 meeting are required to be submitted to me no later than April 30, 2001.

Sincerely,

Devinder Singh Executive Secretary, CTCDC

Attachment

MINUTES

CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE (CTCDC) MEETING OF

FEBRUARY 15, 2001 IN THE CITY OF SANTA CRUZ

The first meeting of the CTCDC in 2001 was held in the Board of Supervisors Room, County of Santa Cruz, in the City of Santa Cruz, on February 15, 2001.

Chairman Ray Mellen opened the meeting at 9:10 a.m. with the introduction of Committee Members and guests. Chairman Ray Mellen thanked John Presleigh, Alternate CTCDC Member, for hosting the meeting. The following Members, Alternates, and guests were in attendance:

ATTENDANCE Members (Voting)	ORGANIZATION	TELEPHONE
Ray Mellen Chairman	Auto Club Southern California Costa Mesa	(714) 885-2301
Jim Larsen Vice Chairman	CA State Association of Counties County of Tulare	(559) 733-6291
Gerry Meis	Caltrans	(916) 654-4551
Ike Iketani	CHP, Sacramento	(916) 657-7222
Wayne Tanda	League of CA Cities City of San Jose	(408) 277-4945
Merry Banks	California State Automobile Association	(415) 565-2297
Farhad Mansourian	CA State Association of Counties County of Marin	(415) 499-6570
John Fisher	League of CA Cities City of Los Angeles	(213) 580-1189

ALTERNATES	ORGANIZATION	TELEPHONE	
Richard Backus	ACSC	(714) 885-2326	
John Squier	Assistant Deputy Director	(213) 458-5900	
1	LA County	` '	
Mark Greenwood	City of Palm Desert	(760) 776-6450	
John Presleigh	County of Santa Cruz	(831) 454-2391	
Dwight Ku	CSAA	(415) 241-8904	
Ed Von Borstel	City of Modesto	(209) 577-5266	
ATTENDEES	ORGANIZATION	TELEPHONE	
Ty Hudson	LA County Counsel	(213) 974-1885	
Michael Harrison	LightGuard System, INC	(707) 542-4547	
Jason Nutt	Marin County-PWD	(415) 499 6528	
Jessy Pu	City of Santa Cruz	(831) 420-5188	
Mark Lewis	City of Fountain Valley	(714) 593-4435	
Jose Alire	City of Fountain Valley	(714) 593-4517	
Shirley Carry	CSAA	(415) 565-2895	
Matt Schmitz	FHWA	(916) 498-5850	
Celo Martinez	City of Watsonville	(831) 728-6074	
Maria Carranza	City of Watsonville	(831) 728-6095	
Rick Berglolz	TAPCO	(800) 236-0112	
Jerry Willing	BlinkerStop/TAPCO	(559) 627-1995	
Dale Jones	BlinkerStop/TAPCO	(805) 541-5475	
Art Lake	Rubber Bush/Traffic Calm	(925) 930-9603	
Conrad Lapinski	Willdan Associate	(209) 295-2558	
Norman Hawkins	Hawkins Traffic Safety	(510) 525-4040	
Theresa Gabriel	Caltrans-HQ	(916) 654-5039	
Mike Yung	Caltrans D7	(213) 897-0263	
Steve Robbins	Santa Cruz County	(831) 454-2965	
	Sheriff Office		
Erik Schnidt	Santa Cruz County	(831) 460-3204	
	Regional Transportation Commission		
Christine Hirsd	Santa Cruz	(831) 454-3405	
Scono Gutierrez	Santa Cruz Health Services Agency		
Rose Hawkins	Hawkins Traffic Safety	(510) 525-4040	
John Hoxie	Caltrans Legal	(916) 654-2630	
Veronica Elsea	Santa Cruz		

CTCDC MINUTES February 15, 2001 Page 4 of 28

MEMBERSHIP

Chairman Ray Mellen introduced Captain Ike Iketani as a CTCDC voting member, representing CHP, who replaced Capt. Karen Douglas. Lieutenant Julie Page is the alternate member, representing CHP, who replaced Lieutenant Mark Rasmussen.

MINUTES

Amendment to the November 9, 2000 minutes:

Page 4 of 16, Item 00-7, the last name of John was spelled wrong, should be "Squier".

Page 9 of 16, Item 99-11, the last sentence at the end of page should have the word "follow" before the word "appropriate".

MOTION: By Jim Larsen, second by Gerry Meis, to adopt the minutes as amended, of the CTCDC meeting held on November 9, 2000 in Palm Desert. Motion carried 7-0.

PUBLIC COMMENTS

None.

AGENDA ITEMS

00-4 USE OF RAISED PAVEMENT MARKERS FOR TRANSVERSE PLACEMENT

Ray Mellen said this item is a continuation from the last meeting and asked Jim Larsen to apprise the Committee. Jim stated that during the last meeting committee members suggested we wait for the FHWA to adopt the Millennium MUTCD, then review the text on raised pavement markers (RPMs) in a transverse pattern. Jim further stated that the RPMs have been used on public roads in California and throughout the United States. They are used as rumble strips, in advance of stop signs, crosswalks and in gore areas. Jim pointed out two Sections, 3B.11 and 3B.15, of the MUTCD 2000 that contain guidance on RPMs. He suggested California should include similar language in the State Traffic Manual.

Ray Mellen asked for comments from committee members and the audience. Mike Patterson of LightGuard asked the Committee if internally illuminated RPMs would also be addressed. John Fisher pointed out Section 3B.11 of the MUTCD 2000 and said that internally illuminated RPMs are an alternative to the retroreflective markers. Wayne Tanda suggested that Caltrans include similar language in the State Traffic Manual. John Fisher agreed with Wayne's suggestion. Gerry Meis said that Caltrans would review the text on RPMs in the MUTCD 2000 in relation to uses in a transverse pattern and work with the Committee to include it in the Traffic Manual. Ray Mellen asked for a motion.

MOTION: Moved by John Fisher, second by Wayne Tanda, recommending Caltrans adopt the language on RPMs from the MUTCD 2000 and place it in the State Traffic Manual. Motion carried 7-0.

Ray Mellen asked for discussion on the motion. Gerry said Caltrans would bring draft language on the RPMs to the next CTCDC meeting for committee members to review.

ACTION: The draft will be submitted to the committee at the next meeting.

00-7 MODIFICATION TO THE POLICY OF WINDING ROAD (W14) SIGN

Ray Mellen said this item is also a continuation from the last meeting and asked Jim Larsen, the sponsor, to appraise the Committee. Jim Larsen stated that during the last meeting it was suggested that LA County Legal Counsel and Caltrans Legal Office discuss the proposed language of the "Winding Road" sign and draft a policy, which is agreeable to both offices. Jim Larsen introduced John Squier, LA County, and asked him to update the Committee. John Squier informed the Committee that LA County Legal Counsel and Caltrans Legal Office had a previous telephone conversation and also had a discussion today. Both parties would like to continue the discussion with Caltrans District Traffic Engineers, Caltrans Headquarters Division of Traffic Operations and other individuals who are interested in the sign policy. John introduced LA County Legal Counsel, Ty Hudson, who had suggested modifying the "Winding Road" sign policy to make it clear to individuals who use it.

Ty Hudson stated his concerns to committee members with the current policy on "Winding Road" signs. Further, Ty said, he had a discussion with John Hoxie, Caltrans Legal Counsel, and they both agreed that more discussion is needed to reach agreement. John Fisher asked about the tort cases with LA County. Ty responded that their office was successful in defending two litigations against LA County, but he raised concerns on the current policy with the County Public Works Department (PWD). Ty suggested to the County PWD that current policy could be modified to make it more easily understood and effective.

Wayne Tanda suggested that when Caltrans Traffic Engineers, Caltrans Legal Office and LA County Legal Counsel discuss the proposed policy, they should also review adequacy of existing signing practice. Gerry Meis responded that the CTCDC has discussed the existing signing practice on a number of occasions previously and the Committee concurred with the signing practice. Gerry further stated he is against opening discussion on the signing practice with the policy issue. If the Committee is interested in discussing the signing practice, there will be an opportunity during the development of the California Supplement to the MUTCD.

Farhad Mansourian said his office would be interested in being part of the group to review the proposed policy versus the existing policy. Jim Larsen said that approximately 15 years ago the

CTCDC MINUTES February 15, 2001

Page 7 of 28

00-7 MODIFICATION TO THE POLICY OF WINDING ROAD (W14) SIGN

(continued)

"Winding Road" sign policy was similar to the national policy. Jim supported the proposed

language, and at the same time suggested that the proposed policy should not change the current

signing practice. Ray Mellen asked for further comments from committee members and the

audience. There were none.

MOTION: Moved by Gerry Meis, second by Merry Banks for Caltrans Legal Office,

Caltrans District Traffic Engineers and LA County Legal Counsel to develop a draft policy

which is acceptable to all. This policy will be presented at the next CTCDC Meeting for

Committee approval.

Ray Mellen asked Gerry Meis to invite those members who would like to participate in the

review process. The Motion was amended to read as follows:

MOTION: Moved by Gerry Meis, second by Merry Banks for Caltrans Legal Office,

Caltrans District Traffic Engineers, LA County Legal Counsel and Members of this Committee,

to confer and draft a proposed policy. The draft will be presented at the next CTCDC Meeting

for Committee approval. Motion Carried 8-0.

ACTION:

Item Continued

01-1 U-TURN SIGNAL HEADS

Ray Mellen advised the Committee that during the last CTCDC meeting, the Committee had recommended placing U-turn signal heads on the agenda for this meeting. Ray asked Gerry Meis to update the Committee. Gerry invited Mike Yung, Caltrans District 7, to answer committee member's questions, if they had any. Gerry stated that left-turn signal indicators are commonly used on public roadways. The U-turn signal head indicator is an internally illuminated message instead of the commonly used "black on white" standard sign. Gerry stated he would like to know if this is a new traffic control device or not. If it is not, then this Committee, in their collective judgement, could recommend that Caltrans develop standards for the U-turn signal head indicator.

Ray asked Mike Yung if there is a U-turn symbol in the yellow phase. Mike responded, the yellow phase is a solid yellow ball. John Fisher informed committee members, that for the record, there is another location (Cal State LA) in Los Angeles, where a U-turn signal indicator has been installed. John inquired if Caltrans had any indication, from the motoring public, whether there is a problem identifying the symbol. John suggested he would like to see the visibility of the symbol addressed.

Wayne Tanda asked Gerry if the Traffic Manual addresses left-turn, right-turn, and through/right-turn arrows. Gerry invited Theresa Gabriel to respond. Theresa Gabriel, Caltrans Headquarters Electrical Branch, referred to Chapter 9 of the Traffic Manual, which addresses the different arrow indications. She further said that the different arrow indications are covered under Sections 9-03.13, 9-03.14 and 9-03.15.

John Fisher expressed that he believes this is a useful device, but would like to see a discernible size for the motorist. What would be the minimum standard size for the U-turn indicator? Wayne Tanda said, in his opinion, these devices are one of the intuitive devices, and he does not believe any experimentation is needed. These devices could be used at selected locations. Ray Mellen asked for comments from committee members and the audience. There were none.

CTCDC MINUTES February 15, 2001 Page 9 of 28

01-1 U-TURN SIGNAL HEADS (continued)

MOTION: By Wayne Tanda, second by Jim Larsen, to recommend that Caltrans develop appropriate standards to ensure visibility and make the U-turn signal head indicator an official traffic control device. Motion carried 7-1. Gerry Meis abstained.

Ray Mellen asked for discussion on the motion. Gerry Meis asked Mike Yung to contact the supplier of the U-turn signal indicator and determine if there has been any studies conducted on the visibility. Mike responded that he will follow up. Ray Mellen suggested that Mike Yung review the Cal State LA and Topanga Canyon locations for visibility to determine if any modifications are needed.

ACTION: Item completed

01-2 PROPOSAL TO EXPAND THE COMMITTEE

Ray Mellen stated that Norm Hawkins has requested the Committee be expanded to include industry representation. Ray asked Gerry Meis to address Norm's proposal. Gerry stated that Norm's request to expand the CTCDC would be a significant change to the structure of the Committee. Gerry further stated that if the Committee approves Norm's request, there would then be the question of who is the appropriate individual to include on the Committee? There are number of organizations that would be interested, e.g. ATSSA, Flasher Barricade, and the Association of General Contractors, etc. Gerry asked Norm to suggest how this should be addressed. Norm responded that it is the Committee's prerogative to decide who is competent to represent the private sector. Norm requested that the Committee define requirements of an individual who would represent the private sector.

Ray Mellen said there is some merit to expand the Committee. Ray quoted Norm's letter, dated January 3, 2001, "remember the Auto Club members are not government employees and represent business with a known interest in profiting from their identity as a member of this Committee." Ray further said that since Norm's statement is on record, he would like to clarify that the Auto Club does not profit from membership on the Committee and objects to this statement. Norm responded that his point was that the Auto Club sells insurance and they are private organizations. Why not include private industry, in the traffic control business, into the Committee? Merry Banks expressed her opinion that for 100 years, CSAA has represented the motorists and today she is sitting here to represent four million motorists. The Club does not profit from the Committee. The Committee always welcomes vendor's or any person's opinion or their expertise for the benefit of motorists. Jim Larsen said he is prepared to suggest that the private sector be included on the Committee. However, the question is how to achieve this. There are a number of entities in the business of traffic control devices.

Farhad Mansourian stated he is not convinced by the proposal as presented to this Committee that there is a need to include the private sector. He further added that until a constructive proposal is brought to this Committee, either demonstrating or justifying expansion of the Committee, he is not in favor of expanding the Committee. He reiterated that the public agency members represent their constituents and vendors and manufacturers are also their constituents.

01-2 PROPOSAL TO EXPAND THE COMMITTEE (continued)

He further added that he has been involved with this Committee for 12 years and does not recall a meeting when a manufacturer or vendor did not receive a fair hearing.

John Fisher noted he is looking at this issue from two perspectives: one, the California model and two, the national model. Under the national model, the membership includes organizations representing pedestrians, bicyclists, rail experts, the insurance industry and many others in the private sector. Also, there are numerous subcommittees. John stated that he sees some value in Mr. Hawkins' proposal, but the number of special-interest members needs to be carefully considered. John said from his personal point of view, he prefers the structure of the California Traffic Control Devices Committee versus the National Committee and does not want to expand the Committee.

Wayne Tanda concurred with John Fisher's comments and suggested addressing this matter in a special workshop. Ray Mellen agreed with Wayne's suggestion.

MOTION: Moved by Farhad Mansourian, second by Merry Banks, that the information provided to this Committee for expansion has no constructive justification. The existing Committee works very well, therefore, there is no reason to expand it.

Ray Mellen asked for discussion on the motion. Wayne stated that he does not disagree with Farhad's motion, but will not support it as presented. Wayne suggested that he will support the motion, if the wording for the motion is rephrased as follows: "At this point in time, not to include vendors to the Committee, but discuss the proposal in a workshop to address Committee needs related to the number of representatives being enlarged or reduced." Jim Larsen asked Norm Hawkins if he would withdraw his request. Jim added that the Committee is willing to review its current structural make up or future needs. Norm replied that this is not fair and not equitable to all, since this Committee has already opened it's doors to the Auto Clubs.

Ray Mellen reiterated that the Committee has a motion by Farhad and a second by Merry Banks. Ray asked Farhad and Merry that if the motion is rephrased as follows: "Do not expand the Committee at this time to include the supplier community but continue reviewing recomposition

01-2 PROPOSAL TO EXPAND THE COMMITTEE (continued)

of the Committee." Would both be willing to restate the motion? They agreed and the motion was reworded as follows:

MOTION: Moved by Farhad Mansourian, second by Merry Banks. Do not expand the Committee at this time to include the supplier community but continue reviewing recomposition of the Committee. Motion carried 8-0.

ACTION: Item tabled. A special Workshop will be scheduled at the next meeting to discuss the Committee representation.

Ray Mellen stated the Committee will determine how to best continue this discussion. The cover letter of the summary of this meeting's minutes would be a tool to communicate with others to receive input on this matter.

01-3 PEDESTRIAN COUNTDOWN SIGNAL HEADS

Ray Mellen stated a Pedestrian Countdown Signal heads (PCSH) experiment, is requested by the City of Fountain Valley. Ray asked John Fisher to address the proposal. John stated that after the last meeting in Palm Desert, the City of Fountain Valley contacted him to obtain authorization for experimentation with PCSH. John explained that there are a number of experiments already approved for the City of San Francisco, the City of San Jose and for the City of Stockton. The Committee will obtain adequate data from those locations to reach a final decision. On the other hand, all the approved locations are from Northern California, and it would be helpful to get data from Southern California. John spoke with Jose Alire, City of Fountain Valley, and Jose also expressed interest in following FHWA's experimentation process along with the California process. John introduced Mark Lewis and Jose Alire, City of Fountain Valley, and asked them to present their proposal to the Committee.

Mark Lewis, City Engineer, City of Fountain Valley, submitted a request for Authorization to Experiment with the use of PCSH, a non standard traffic control device, at five intersections. The City has received numerous requests for this type device from crossing guards, schools, pedestrians, senior facilities, and the Traffic Advisory Committee. The problem expressed by these groups is the time allotted to cross the street. Apparently pedestrians of various ages have difficulty understanding when to begin crossing, and judging how much time is remaining to complete crossing the street safely. Because of the number of requests received by the city, the city staff believed that pedestrian countdown signals merit consideration as a tool to provide pedestrians additional information.

There was considerable Committee discussion regarding coordination of the PCSH countdown with the "WALK" and "DON"T WALK" symbols.

Ray Mellen asked for comments from the audience. Matt Schmitz, FHWA, said that after listening to the discussion and analyzing the proposal, he would prefer consistency in all the Authorization for Experimentation. Matt added that if the "countdown" and "walking symbol" illuminated simultaneously, this may provide a false sense of security at different intersections

01-3 PEDESTRIAN COUNTDOWN SIGNAL HEADS (continued)

with different walking distances. Matt was confident that he would obtain quick approval from FHWA Headquarters Office, if the city chose to resubmit their proposal to maintain uniformity.

MOTION: Moved by Wayne Tanda, second by Jim Larsen, to approve for experimentation the Pedestrian Countdown Signal Heads request submitted by the City of Fountain Valley. The countdown is to start at the flashing "DON'T WALK" and the evaluation is to include the same information requested from the other California cities conducting similar experiments. Motion carried 8-0.

The following two paragraphs summarizes the Committee's actions on earlier approvals to experiments with PCSH:

The countdown should begin at the start of the "Flashing Don't Walk" to maintain uniformity. The study would include information regarding its effectiveness, such as the number and percentage of pedestrians illegally entering the crosswalk on the "Flashing Don't Walk" or "Solid Don't walk", during the before and after periods. The study would also include a survey regarding the public's comprehension of the simultaneous display of the "Flashing Don't Walk" and the countdown display. Specifically, it would be desirable to know what percentage of the public incorrectly interprets the simultaneous display to mean that leaving the curb is legal as long as the pedestrian can complete the crossing before the countdown reaches zero.

The study would also include the motorist behavior "before and after." This behavior could be characterized by the number of cars running yellow and red signals and might indicate whether motorist's speed up as a result of this device. In addition to that study, the survey would also include pedestrian behaviors that could be adversely affected by installing these devices, hesitating in the roadway, running as well as returning to the curb after starting to cross.

Ray Mellen asked for discussion on the motion. John Fisher asked Matt Schmitz if he could tell the Committee about experiments at the national level and what type of information they

01-3 PEDESTRIAN COUNTDOWN SIGNAL HEADS (continued)

included. Matt responded that he is not aware of other experiments, however, he would be able to obtain this information from the FHWA Washington office. Wayne Tanda stated that the County of Sacramento installed both systems, countdown with the symbol "WALK" and also with the flashing "DON'T WALK." The County stated that the countdown with the flashing "DON'T WALK" was much more effective.

ACTION: Item completed.

01-4 TACTILE PESDESTRIAN INDICATOR WITH AUDIBLE INFORMATION

Ray Mellen asked Wayne Tanda to address the Tactile Pedestrian Indicator (TPI) with audible information. Wayne stated that the City of Santa Cruz has requested authorization for experimentation from the CTCDC to evaluate the TPI with audible information.

Ron Marquez, Traffic Engineer, City of Santa Cruz, stated that the City of Santa Cruz requests authorization for experimentation with a TPI and audible information (voiced instruction) at seven intersections. Six installations would be at State Route 1, and one would be at a city street intersection. The TPI has been adopted by the MUTCD 2000, but has not yet been adopted by the State of California. Ron stated that existing standards (bird sounds) for audible pedestrian signals have worked well most of time except for pedestrians who are both blind and deaf. Also, the City of Santa Cruz has experienced problems with mocking birds imitating the audible signals, which is confusing to guide dogs. Also, the chirping sounds bouncing off buildings in close proximity to the intersections have caused blind pedestrians to become disoriented as they cross the streets. To use this system, a pedestrian pushes the button as would normally be done when desiring to cross a street. The push buttons are located by an audible tone emitted from the box. If the pedestrian depresses the push button for three seconds a voice will say "Crossing Mission Street at Walnut Street." If a hearing impaired person places their hand on the protruding arrow, in the center of the panel directly above the push button, the pedestrian sequence begins; the arrow will vibrate through the "WALK" interval. In addition, during the " WALK "interval a voice will announce, "WALK" sign is on crossing Mission Street". Both the vibration and voice information are hard wired to the "WALK" interval and therefore will not activate during the "ped clearance" and "DON'T WALK" intervals. Ron then introduced Ms. Veronica Elsea, who represented the sight-impaired community of Santa Cruz. Veronica advised the Committee that she and other sight-impaired pedestrians from the City of Santa Cruz are highly supportive of this experimental proposal. Veronica reaffirmed Ron Marquez's statement related to the problems they have with the audible (bird sounds) system. She pointed out that these devices have been used in California and throughout the nation. She also mentioned that the MUTCD 2000 has adopted these devices. Veronica cited a survey conducted by the American Council of the Blind, which indicated more people are confused by

01-4 TACTILE PESDESTRIAN INDICATOR WITH AUDIBLE INFORMATION

(continued)

the "coo-coo" and "Chirp" sounds. The survey also indicated that 5 to 7 percent of the sight-impaired persons interviewed reported incidences that occurred while either not crossing the street or crossing the street because they were misled by a live bird's sound. Veronica stated that experimentation on Mission Street (State Route 1) with TPI would also be beneficial as Mission Street is designated a north/south street, but is also east/west at certain locations.

Ray Mellen pointed out that Eugene Lozano, Chairman on Access and Transportation, California Council of the Blind, has written a letter in support of the experimentation request on TPI with audible information. Veronica added that she had spoken with Eugene Lozano, regarding this experimentation request and he is supportive of any meaningful experimentation that utilizes auditory announcement of the onset of the "WALK" phase. Ray Mellen asked for comments from the committee members.

John Fisher asked why these experimental locations also have audible features. Veronica responded that some people might prefer one message over the other message. Ed Campbell, from Polara Engineering, demonstrated the operation of the device and explained the different functions. Ed demonstrated how to switch from one feature to the other and how voice sound could be adjusted in the field. Ed added that this device is consistent with the MUTCD 2000. Ray Mellen asked for comments from the audience.

Mark Lewis, City of Fountain Valley, supported the experimentation request and said the City of Fountain Valley is also considering these types of devices. Ray Mellen asked for a motion.

MOTION: Moved by Merry Banks, second by Gerry Meis, to approve authorization for experimentation with the "Tactile Pedestrian Indicators with Audible Information", requested by the City of Santa Cruz.

Ray Mellen asked for discussion on the motion. John Fisher asked why the Committee is requiring the City of Santa Cruz to install these devices for experimentation, when they are

01-4 TACTILE PESDESTRIAN INDICATOR WITH AUDIBLE INFORMATION (continued)

already approved at the national level and included in the MUTCD 2000. John further said that other states could install these devices without going through the experimental process. John suggested that Caltrans should adopt the MUTCD language on "Accessible Pedestrian Signals" into the Traffic Manual. Jim Larsen agreed with John's suggestion.

Gerry Meis pointed out to the Committee that Caltrans wants feedback from the sight-impaired community. Gerry further added he would be reluctant to make any decisions without consulting Caltrans Districts and without input from the blind community. Ray Mellen suggested against adopting only a portion of the MUTCD language into the Traffic Manual. Wayne Tanda suggested that the Committee should keep the process going for the City of Santa Cruz and concurrently work on adopting the MUTCD language into the Traffic Manual. Ray Mellen asked for a vote on the motion. Motion carried 8-0.

ACTION: Item completed.

John Fisher suggested that since the motion has been approved for the City of Santa Cruz, he would like to put this item on the agenda for the next meeting to adopt the MUTCD language into the Traffic Manual. Ray again questioned adopting only a portion of the MUTCD language into the Traffic Manual. Jim Larsen pointed out that this Committee has done the same thing in the past, even just this morning when the Committee recommended Caltrans adopt the raised pavement marker language from the MUTCD into the Traffic Manual. Gerry stated that if the Committee considers putting this item on the agenda for the next meeting, this will allow some time to discuss the issue with Caltrans Districts, and the sight-impaired community would have the opportunity to provide input to this Committee. Ray Mellen asked for a motion.

MOTION: Moved by John Fisher, second by Wayne Tanda, placing the "Accessible Pedestrian Signal" on the agenda for next CTCDC meeting to discuss the feasibility of adopting the MUTCD language into the Traffic manual. The MUTCD 2000, Section 4E.06 "Accessible Pedestrian Signal" provides for information in non-visual format (such as audible tones, verbal message, and/or vibrating surfaces).

ACTION: Item to be placed on next agenda.

PUBLIC COMMENTS

Ray Mellen asked for public comments. Matt Schmitz, FHWA, advised the Committee that the U.S. Department of Transportation has published policy guidance on Title VI's prohibition against national origin discrimination as it affects limited English proficient persons. Comments must be submitted on or before March 23, 2001. U.S. DOT will review all comments and will determine what modifications to the policy guidance, if any, are necessary. Limited-English-Proficient (LEP) persons are individuals with a primary or home language other than English who must, due to limited fluency in English, communicate in that primary or home language if the individuals are to have an equal opportunity to participate effectively in or benefit from any aid, service or benefit provided by the transportation provider or other DOT recipient.

Recipients must take reasonable steps to ensure "meaningful access to DOT recipients' programs and activities. The key to providing meaningful access to LEP persons is to ensure that recipients and LEP beneficiaries can communicate effectively and act appropriately based on that communication. The policy can be reviewed in detail by using the following website address: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2001_register&docid=01-1745-filed.pdf

INFORMATION ITEMS

99-11 MUTCD ADOPTION BY CALTRANS

Ray Mellen asked Gerry Meis to update the Committee on the process of developing the California Supplement to the MUTCD. Gerry Meis invited Johnny Bhullar to apprise the Committee on the process that Caltrans plans to follow in the development of the California Supplement to the MUTCD.

Johnny Bhullar distributed to committee members a handout containing the process outline. Johnny informed the Committee that he is in the process of forming an Advisory Committee (AC) of Caltrans individuals statewide, who have expertise in the field of traffic control devices. Johnny told the Committee that he would crosscheck each section of the MUTCD and the Traffic Manual, one at a time, and prepare the draft section or sections, where the Traffic Manual differs from the MUTCD. The AC will then be invited to review and discuss the draft. After incorporating the AC comments, the draft text for each chapter of the MUTCD will be put on the Caltrans website for general comments. At the same time, the draft text will also be sent to CTCDC members for their review and comments. All the comments would be discussed again with the AC, and if there were no conflicts, the final draft would be prepared and brought to the CTCDC meeting for final review. This process would be continued until the whole California Supplement is developed.

Ray Mellen asked about the time frame for completing this process. Johnny responded that his target is between one and two years. Ray clarified that the draft would come to the committee members for comments at the same time as it is posted on the website for general comments. Johnny responded affirmative.

Wayne Tanda asked Johnny to clarify the role of the Committees' involvement in this process, and at what time would the Committee be involved in the review process. Johnny reaffirmed his previous comments and added that after incorporating AC comments, the draft will be sent to the committee members and put on the Caltrans website for comments. Committee members suggested that their involvement would be beneficial before it goes to the Caltrans website for

99-11 MUTCD ADOPTION BY CALTRANS (continued)

general comments. Wayne Tanda asked if Caltrans could bring a sample of the MUTCD supplement adopted by other states. Johnny responded that he would bring a sample to the next CTCDC meeting. Farhad Mansourian stated that the CTCDC should be involved where there is a significant difference between the MUTCD and Traffic Manual.

ACTION: Item continued.

BLINKERSTOP SIGN

Ray Mellen stated that the BlinkerStop sign is an information item and the TAPCO Company is requesting direction from the Committee on their device. Dave Royer, consultant for TAPCO, stated that he is very impressed with the device because it does not alter the existing sign. Dave further stated he advised TAPCO to bring this device to the CTCDC and see if the Committee could identify the proper uses of this device without experimentation. Dave suggested that this type of device could be used on most warning and regulatory signs, especially for the curve warning signs where a flashing beacon is currently used.

Rick Berglolz, TAPCO, stated that their company has installed a few of these signs in Wisconsin. The LED (located at the corners of a stop sign) does not interfere with the border of the sign and does not alter the sign message. It is a very exciting device and it has generated tremendous response from the public. Rick also referred to Sections 2A-08 and 2A-1 from the MUTCD 2000, which addresses color, shape, and visibility during daylight and darkness. Dale Jones asked committee members if they have received the "Conspicuity Test Data from the Wisconsin Study" dated February 12, 2001. The committee members had that report in their packet.

Gerry Meis asked if the BlinkerStop sign is a new traffic control device or a new product. Rick responded that in his opinion it is a new traffic control device. John Fisher pointed out that the LED has opened up a whole new area of new ways to communicate with motorists. He questioned whether the LED on the Stop sign is a flashing beacon. John stated that this is not a new sign, but rather a new type of flashing beacon. Jim Larsen agreed with John's comments.

Dave Royer stated that this device does not require a separate power source as it operates with three batteries. Rick suggested that this device could be used in hazardous locations. It could also be used in school zone areas and at school bus stops.

Farhad Mansourian stated that this is an innovative device and it does not change the shape, color, and message. In his opinion, this is not a new traffic control device. Gerry Meis

CTCDC MINUTES February 15, 2001 Page 23 of 28

BLINKERSTOP SIGN (continued)

commented that there are a number of new traffic control devices equipped with LED's, and this Committee and Caltrans should be very careful to identify appropriate uses for these devices.

Wayne Tanda said that it is a flashing beacon on the Stop sign, which does not meet the size and standards of the approved flashing beacon. Wayne suggested that Caltrans should determine if this meets the flashing beacon standards. John Fisher also pointed out that this device deviates from the language mentioned in Section 5.04.4 (hand signal devices) of the Traffic Manual. In summary, committee members said that this is an "information item" and suggested that TAPCO work with Caltrans and conduct a need assessment. Provided a need is established, this item will be reintroduced as an agenda item if further action is needed from this Committee.

CTCDC MINUTES February 15, 2001 Page 24 of 28

SIGN ON CHANNELIZERS

John Fisher brought up this item for the Committee's opinion. The committee members suggested putting it on the agenda for the next meeting.

SPECIFICATIONS FOR YELLOW AND GREEN LED SIGNAL HEADS

The following Caltrans website could be viewed for detail information on "Yellow and Green" LED signal heads:

http://www.dot.ca.gov/hq/esc/ttsb/electrical/electrical_index.htm

CTCDC MINUTES February 15, 2001 Page 26 of 28

PUBLIC COMMENTS

Ray Mellen asked for public comments. Mike Harrison from LightGuard asked if Caltrans received experimentation data on the bi-directional in-roadway warning lights (IRWLs) from the agencies who have installed this system. He also pointed out to the Committee that he has written a letter to Gerry Meis and a copy was provided to the committee members to obtain this information. Gerry Meis responded that Caltrans has not received data from the agencies that have installed this system on their roadways. However, Caltrans has contacted public agencies for this information. Gerry asked Mike if there are any studies or data indicating which system is better. Mike responded that he has no information.

Mike stated that if the bi-direction IRWLs are proven effective, his company would like to provide the system to public agencies that are interested in installing this system. Gerry responded that he has not seen any conclusive report identifying which system is better. He also mentioned that Caltrans will adopt text similar to the MUTCD 2000, and this will be included in Chapter 9, Traffic Signals, of the Traffic Manual.

OFF THE AGENDA ITEM

Ray Mellen asked Captain Ike Iketani to brief the Committee regarding the "School Bus" sign. Ike invited John Short, CHP, Marin Area Office, to address the Committee. Officer Short advised the Committee that a large number of motorists are negligent in their responsibility to abide by the school bus "Flashing Red Light" law. Officer Short further stated that their Office has written hundreds of letters to motorists who did not obey the law when a school bus was stopped with the "Flashing Red Lights" on. Ray Mellen asked Officer Short if citations are being given to those who violate the law. John responded that letters were written, based on information received from school bus drivers. Officer Short suggested that the sign "DO NOT PASS WHEN RED LIGHTS FLASHING" would serve as a "visual" alert to motorists as well as an additional public awareness that passing is prohibited when "Flashing Red Lights" are on.

Wayne Tanda suggested that the CHP and Caltrans work together and determine if this sign is needed. If it is determined that a sign is needed, then Caltrans will develop an appropriate message, standard sign, specification, including policy and then return to this Committee for further discussion.

CTCDC MINUTES February 15, 2001 Page 28 of 28

NEXT MEETING

Ray Mellen asked committee members for suggested date for the next meeting and also suggested holding four meetings this year. Ray reminded committee members that the By-Laws requires a minimum of three meetings per year. There were no objections to holding four meetings this year. The next meeting will be held on June 7, 2001, in the Auditorium, Caltrans District 11, at 2829 Juan Street, San Diego, CA 92186.

ADJORNMENT: The meeting was adjourned at 3:05 PM.